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## 4.11 Public Services

As discussed in the revised LAX SPAS EIR Notice of Preparation/Initial Study (October 2010), provided in Appendix A, *Notice of Preparation/Scoping*, the proposed project does not include any residential development, schools, park/recreation areas, or library facilities. Furthermore, the proposed project would not result in a direct physical impact or alteration to any public park/recreation areas or public libraries. The SPAS alternatives would require the acquisition of a Los Angeles Unified School District (LAUSD) parcel with two charter schools. Impacts related to these schools are address in Section 4.9, *Land Use and Planning*, and were determined to be less than significant.

Employment and visitor-related demand for parkland, libraries, and schools is considered to be less than significant. Therefore, impacts related to schools, parks/recreation areas, and libraries do not require any further analysis and are not addressed herein.

### 4.11.1 Fire Protection

#### 4.11.1.1 Introduction

The fire protection analysis addresses the potential for the SPAS alternatives to increase demand for fire protection and emergency services at and adjacent to LAX. The primary focus of the analysis is on whether the SPAS alternatives would result in facility capacity constraints, or unacceptable emergency response times. Fire protection and emergency services related to aircraft incidents are addressed in Section 4.7.2, *Safety*. Additional discussion of emergency response is provided in Sections 4.7.3, *Hazardous Materials*.

#### 4.11.1.2 Methodology

Potential impacts to fire protection services were assessed by comparing baseline conditions (existing as of fourth quarter 2011) with future conditions expected with implementation of the SPAS alternatives. Baseline information is from 2011 as this is the timeframe during which information regarding existing fire protection services was obtained from service providers. As site conditions did not materially change between 2010 and 2011, 2011 conditions are considered to be representative of 2010. Characterization of baseline conditions includes a description of existing fire protection facilities, staffing, equipment levels, and response times. This information was obtained from the Los Angeles Fire Department (LAFD).

The fire protection study area is based on fire protection service area boundaries and also incorporates the LAX property and areas surrounding LAX potentially affected by implementation of the SPAS alternatives. The approach to evaluating impacts on fire services considers whether conditions under the SPAS alternatives would meet key criteria set forth by LAFD, or required by the Los Angeles Fire Code (LAFC) or Federal Aviation Regulations (FARs).

#### 4.11.1.3 Existing Conditions

##### 4.11.1.3.1 Regulatory Context

###### Federal Regulations

Federal regulations that apply to fire protection and emergency services include the National Fire Protection Association (NFPA) Code. Federal agencies which have jurisdiction over activities at LAX that relate to fire protection and emergency services, such as the FAA and the U.S. Coast Guard, have regulations which must be consistent with the NFPA Code. **Table 4.11.1-1** includes a partial list of applicable federal regulations, a summary of their provisions, and a list of responsible federal agencies.

## 4.11.1 Fire Protection

**Table 4.11.1-1**

**Federal Regulations**

<b>Regulation</b>	<b>Summary of Provisions</b>	<b>Regulating Agency</b>
National Fire Protection Association Code	Establishes fire safety provisions	
Federal Aviation Administration Regulations (FAR) 139.315 through 139.319	Aircraft Rescue and Fire Fighting (ARFF)	FAA
FAR 139.321	Hazardous substances that require fire safety training	FAA
FAR 139.325(f)	Requires Airport Emergency Plans to provide for Air/Sea Disaster Response	FAA/U.S. Coast Guard
FAR 139.325(4)	Airport response to natural disasters	FAA
U.S Department of Labor 29 CFR 1910.38	Emergency action plans	FAA

Source: PCR Service Corporation, 2011.

### Federal Aviation Regulations

FARs serve as the basis for the LAWA Rules and Regulations Manual and the LAX Air/Sea Disaster Preparedness Plan discussed below. The fire and fire-related safety provisions found in these documents are also in accordance with applicable sections of the Uniform Fire Code (UFC) and/or the NFPA Codes and Standards. FAR mandates many aspects of emergency response services at LAX, including equipment types, personnel training, vehicle response times, and readiness.

### Aircraft Rescue and Fire Fighting

Aircraft Rescue and Fire Fighting (ARFF) is regulated under FAR Sections 139.315 through 139.319. Handling and storage of hazardous substances and materials which require fire safety training in fuel farm and storage areas, and required compliance with locally-adopted fire codes, are provided for under FAR 139.321. Under FAR 139.325, airport safety plans require coordination with fire fighting services and provision of rescue vehicles large enough to handle the maximum persons carried aboard the largest aircraft that can be served. ARFF protocol requires apparatus to respond in three minutes or less from the position of the equipment to all areas within aircraft operating areas. Should equipment become inoperable for a period exceeding 48 hours, the FAA requires that airport operations be limited to the response capability of equipment in operative condition unless waived by the FAA. LAFD Station 80, located at LAX, is an ARFF-compliant facility.

The FAA-operated Airport Traffic Control Tower (Control Tower) at LAX activates the emergency telephone system which notifies airlines when they are involved in safety-related operations. In addition, the Control Tower coordinates runway assignments with LAX Airfield Operations personnel and is authorized when warranted to stop aircraft traffic on runways and taxiways adjacent to the scene of an emergency response.

### Air/Sea Disaster Response

Due to its unique nature, an accident involving an aircraft over water requires a two-part command and control system. FAR 139.325(f) requires that airport emergency plans also provide a plan "for the rescue of aircraft accident victims from significant bodies of water or marsh lands adjacent to the airport . . . ." The U.S. Coast Guard is responsible for coordinating the search and rescue operations, including shore-

side coordination and support with the assistance of representatives from the Los Angeles County Sheriff's Department (LACSD), Los Angeles County Lifeguards, Los Angeles County Fire Department (LACFD), LAWA, the Los Angeles Police Department (LAPD), Los Angeles Airport Police Department (LAXPD), and airline representatives.

### **Natural Disaster**

Natural disasters are emergency situations declared by the President of the United States in response to, and in agreement with, a request from the Governor of the State of California. Emergency action plans are addressed in general by 29 CFR 1910.38, Employee Emergency Plans, and Fire Prevention Plans.

The requirement for preparation for airport response to a natural disaster is regulated by FAR 139.325(4). In the event of a natural disaster, it is the responsibility of the Control Tower to issue a Notice to Airmen (NOTAM) if it is determined that this is necessary. In the event that the condition of the airport or any part of the airport is determined to be unsafe for landings or takeoffs, a NOTAM is issued closing the airport or any of its parts. In addition, the Control Tower verifies that the navigational aids system is operating.

### **The National Fire Protection Association Code**

The NFPA advocates consensus of codes and standards for fire and related safety issues and has developed the NFPA Code, which establishes safety provisions for fire prevention and fire fighting regulatory structures. As these codes are adopted on a voluntary basis by individual communities into their own fire protection and emergency services operations, there are no legislative enforcement mechanisms.

### **State Regulations**

#### **State of California Uniform Fire Code**

The UFC sets the framework for fire protection and safety within the State of California. The UFC contains several sections which provide authority and standards that pertain to operations at airport facilities.

#### **Fire Fighting Authority**

Article 2 provides standards for the organization, authority, duties, and procedures for fire fighting. Division I (Organization and Authority), Section 2.105 provides for the exercise of police powers by fire fighters. Division II (Duties and Procedures), Section 2.201 provides for fire inspection and characterizes what can be declared an unsafe building.

#### **Fire Access**

Article 10 (Fire Protection Systems and Equipment), Division II (General Provisions), Section 10.207 specifies access roadway requirements for fire apparatus. Article 12 (Maintenance of Means and Egress and Emergency Escapes), Section 12.109, provides standards for stair, ramp, and escalator enclosures.

#### **Air Service Operations**

Article 24 provides standards for airports, heliports, and helistops in Division I (General), Sections 12.013 (Dispensing Flammables or Combustible Liquids), 12.104 (Transferring Fuel), 24.105 (Application of Flammable or Combustible Liquid), and 24.111-24.116, which provide aircraft service and repair standards. Provisions for safety standards of fuel system maintenance and use is provided in Article 24, Division II (Refueler Units), Sections 24.202 (Operation Maintenance and Use of Aircraft Refueler), 24.203 (Fueling and Defueling); and Article 79 (Flammable and Combustible Liquids), Division I (General), Section 79.114 (Fire Protection); Division II (Container and Portable Tank Storage Inside Buildings), Section 79.205 (Fire Protection); and Division VI (Tank Storage Underground, Outside or Under Buildings), Section 79.511 (Fire Protection).

## **4.11.1 Fire Protection**

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### **Materials Handling**

Article 80 (Hazardous Materials), Section 80.103 (General Requirements) and Section 80.110 (Designation of Cargo) provide for the identification and handling of hazardous materials sent as air cargo.

### **Fuel Farm and Fuel Dispensing Systems**

Portions of the fuel hydrant system are within the jurisdiction of the State Fire Marshal. In addition, fuel farm siting, design, construction, and equipment are regulated under the UFC, Article 79 (Flammable and Combustible Liquids), Division V (Stationary Tank Storage, Above Ground, Outside of Buildings), with fire protection specifically addressed by Section 79.511.

### **Office of Emergency Services Mutual Aid Plan**

The California Fire Service and Rescue Emergency Mutual Aid System is managed by the Governor's Office of Emergency Services (OES). The OES Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and state levels, and divides the state into six mutual aid regions to facilitate the coordination of mutual aid. LAFD is located in Region I. Through the Emergency Mutual Aid system, the OES is informed of conditions in each geographic and organizational area of the state, and the occurrence or imminent threat of disaster. All OES Mutual Aid participants monitor a dedicated radio frequency for fire events that are beyond the capabilities of the responding fire department and provide aid in accordance with the management direction of the OES.

### **County Regulations**

#### **The Mutual Aid Operations Plan**

The Disaster Preparedness Section of the LACSD, Emergency Operations Bureau conducts active disaster/emergency planning with other public and private organizations, including all incorporated cities within the County, the American Red Cross, and various public and private civil defense/disaster planning entities. The County of Los Angeles is also required to organize a formal mutual aid agreement between all fire departments within its jurisdiction. Additional informal agreements may be made directly between the fire departments involved. The Mutual Aid Operations Plan is a reciprocal agreement between signatory agencies to provide personnel and resources to assist other member agencies during emergency and/or conditions of extreme peril. The Mutual Aid Operations Plan provides a structure of response should an emergency at LAX arise which requires immediate response by more fire protection personnel than would be available to LAFD using all other available resources.

### **City Regulations**

The City of Los Angeles establishes fire protection and emergency services regulations for both on- and off-airport property. On-airport areas are subject to provisions included in the LAWA Rules and Regulations Manual, LAX Airport Emergency Plan (AEP), the LAX Air/Sea Disaster Preparedness Plan, the General Plan Safety Element, and the LAFC.

### **LAWA Rules and Regulations Manual**

The Rules and Regulations Manual for LAWA is published under authority contained in Sections 632(b) and 633(a) and (b) of the Los Angeles City Charter, which empowers LAWA to make rules and regulations governing the use and control of City airports, subject to the powers of the United States respecting commerce. The Rules and Regulations Manual complies with FAA and the Transportation Security Administration (TSA) FAR Part 139 and Transportation Security Regulation (TSR) Parts 1540

and 1542, which requires airport management to establish operational and safety procedures and measures to meet FAA and TSA requirements for airport certification.<sup>619</sup>

The Fire and Safety Section, Section 6 of the LAWA Rules and Regulations Manual, specifically applies to fire safety at LAX. As discussed under Section 6, the Airport Fire Inspector is required to inspect all buildings, structures, and premises periodically, as well as enforce all applicable laws, rules, and regulations regarding fire protection, including the UFC, NFPA Codes and Standards, and the LAFC.<sup>620</sup>

### **LAX Airport Emergency Plan**

In accordance with FAA guidance provided in Advisory Circular 150/5200-31C, the AEP addresses essential emergency-related and deliberate actions to ensure safety and the provision of adequate emergency services for LAX and surrounding communities. The AEP details the roles and responsibilities that first responders, airport managers, commercial carriers, and airport tenants are to undertake in an emergency.<sup>621</sup>

### **LAX Air/Sea Disaster Preparedness Plan**

The LAX Air/Sea Disaster Preparedness Plan was approved by the FAA on November 26, 1991, with sections approved on August 19, 1991. The LAX Air/Sea Disaster Preparedness Plan was "established to provide a course of action to be followed in the event an accident involving an air carrier occurs in the immediate vicinity of Los Angeles International Airport (LAX) over water." LAFD provides personnel, aircraft, and nautical equipment as needed to assist with any aircraft incidents over water (accidents at sea) or elsewhere.

### **City of Los Angeles General Plan Safety Element**

The General Plan Safety Element, adopted on November 26, 1996, contains policies related to the City's response to hazards and natural disasters. Policy 2.1.6 requires LAFD to maintain, enforce, and upgrade requirements, procedures, and standards to facilitate effective fire suppression including peak load water flow and building and fire code regulations. In addition, LAFD is required to revise regulations or procedures to include the establishment of minimum standards for the location and expansion of fire facilities, based on flow, intensity, and type of land use, life hazards, occupancy, and degree of hazards, in order to ensure adequate fire and emergency medical service response.

### **Los Angeles Fire Code and Charter**

The provisions of the LAFC are detailed in Section 57.09.01-11, Article 7 (Fire Protection and Prevention) of Chapter V (Public Safety and Protection) of the Los Angeles Municipal Code (LAMC). As stated therein, the LAFD Bureau of Fire Prevention and Public Safety is required to administer and enforce basic building regulations set by the State Fire Marshal. The LAFC also provides regulations for the safeguarding of life and property from fire, explosion, panic, or other hazardous conditions which may arise in the use or occupancy of buildings, structures, or premises. Division 101 of the LAFC regulates fire and life safety for all airports, heliports, aircraft factories, aircraft hangars, and aircraft repair hangars. Further, this Division regulates the ground fuel servicing of all types of aircraft with petroleum fuels.

Section 520 of the Los Angeles City Charter requires LAFD to control and extinguish injurious or dangerous fires and remove that which is liable to cause those fires; enforce all ordinances and laws relating to the prevention or spread of fires, fire control, and fire hazards within the City; conduct fire investigations; and protect lives and property in case of disaster or public calamity.

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<sup>619</sup> City of Los Angeles, Los Angeles World Airports, Airport Police Division, Rules and Regulations Manual, Available: <http://www.lawa.org>, accessed November 30, 2011.

<sup>620</sup> City of Los Angeles, Los Angeles World Airports, Airport Police Division, Rules and Regulations Manual, Available: <http://www.lawa.org>, accessed November 30, 2011.

<sup>621</sup> City of Los Angeles Mayor's Blue Ribbon Panel, Report of the Mayor's Blue Ribbon Panel on Airport Security. A Report to Los Angeles Mayor Antonio R. Villaraigosa Concerning Public Safety at Los Angeles International Airport, June 2011.

## 4.11.1 Fire Protection

### 4.11.1.3.2 Setting

Four LAFD fire stations (Stations 80, 51, 5, and 95) are located on airport property and have direct responsibility for fire protection and emergency services within the airport boundaries. With the exception of Fire Station 80, which only responds to incidents at LAX, Fire Stations 5 and 95 serve portions of the neighboring communities as well as LAX, and Fire Station 51 serves Dockweiler State Beach in addition to a majority of LAX.<sup>622</sup> These fire stations are shown in **Figure 4.11.1-1** and a summary of existing facilities, equipment, and personnel for these stations is provided in **Table 4.11.1-2**.

**Table 4.11.1-2**

**City of Los Angeles Fire Department Stations Serving LAX**

Station #	Address	Response Distance (Miles) <sup>1</sup>	Floor Area (SF)	Personnel <sup>2</sup>	Equipment
51 <sup>3</sup>	10435 Sepulveda Blvd.	0.4	8,600	6/18	1 Fire Engine 1 Paramedic Rescue Ambulance 1 Rescue Apparatus
80 <sup>4</sup>	7250 World Way West	1.9	27,500	14/42	4 Specialized Fire Trucks 1 Reserve Truck 1 Stair Truck 1 Pick-Up
95 <sup>5</sup>	10010 International Road	1.0	9,500	12/36	1 Truck with 100' ladder 1 Fire Engine Pumper 1 Paramedic Rescue Ambulance 1 Rescue Air Cushion 1 Paramedic Rescue Ambulance
5 <sup>6</sup>	8900 Emerson Avenue	1.4	24,700	14/42	1 USAR vehicle 2 Fire Engines 1 Fire Truck 1 Paramedic Rescue Ambulance 1 Battalion Chief Vehicle
<b>Totals</b>			<b>70,300</b>	<b>46/138</b>	

<sup>1</sup> Calculated from World Way and Sepulveda Boulevard for all structures located at LAX.

<sup>2</sup> Per shift total

<sup>3</sup> Fire Station 51 provides the primary medical response to the Central Terminal Area (CTA) and gate areas and provides aircraft incident response support to Fire Station 80 when needed. Fire Station 51 also serves a portion of Dockweiler State Beach and the Radisson Hotel property.

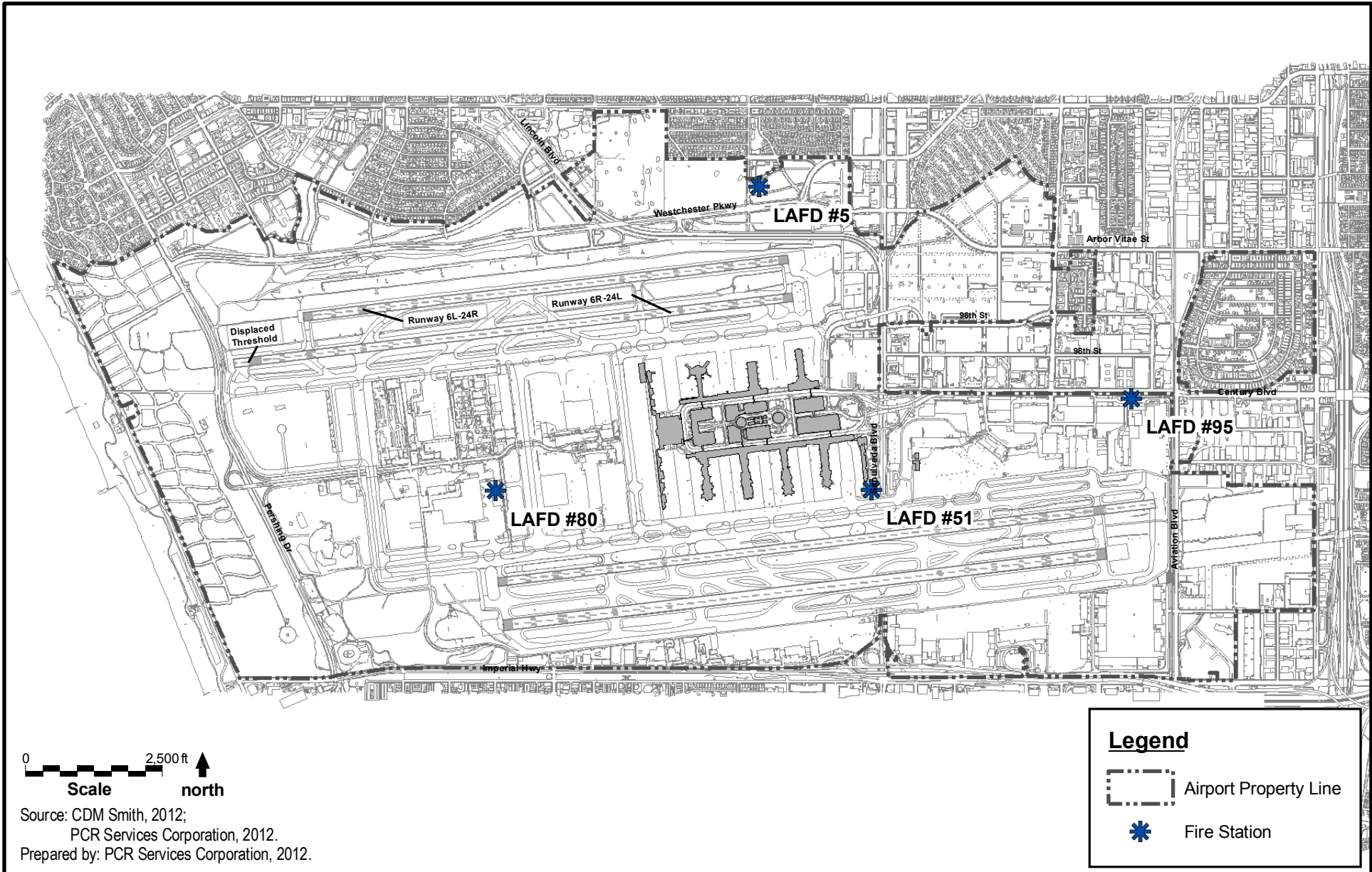
<sup>4</sup> Serves as an Aircraft Rescue and Fire Fighting Facility

<sup>5</sup> This station also houses equipment for the standby HazMat company and personnel are trained to respond as a HazMat Unit.

<sup>6</sup> This station also houses equipment for a standby Urban Search and Rescue Team (USAR) and its personnel are trained to respond as a USAR unit.

Source: City of Los Angeles Mayor's Blue Ribbon Panel, Report of the Mayor's Blue Ribbon Panel on Airport Security. A Report to Los Angeles Mayor Antonio R. Villaraigosa Concerning Public Safety at Los Angeles International Airport, June 2011; Captain Mark Woolf, Battalion Commander, Los Angeles Fire Department, Personal Communication, January 25, 2012.

<sup>622</sup> LAFD Station 67 primarily serves Playa Vista, but a small portion of LAX property in the Dunes area is part of its service area. Given the small undeveloped nature of the area within LAX property, Station 67 is not a primary station serving LAX and is not considered in this analysis. Nonetheless, in certain circumstances, it could be available to provide supplemental fire service support.



0 2,500 ft  
 Scale north

Source: CDM Smith, 2012;  
 PCR Services Corporation, 2012.  
 Prepared by: PCR Services Corporation, 2012.

**Legend**

-  Airport Property Line
-  Fire Station

#### **4.11.1 Fire Protection**

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LAFD is responsible for providing services on and off airport property within the fire protection study area. While LAFD stations have jurisdiction and primary responsibility for serving LAX, both the OES Mutual Aid Plan and the County of Los Angeles Mutual Aid Operations Plan ensure that LAX would receive supplemental personnel and resources during a major emergency and conditions of extreme peril. Currently, the City of El Segundo is the only jurisdiction adjacent to LAX that provides mutual aid support to the airport through an additional mutual aid agreement. The City of El Segundo provides fire response backup and emergency medical services to the City of Los Angeles upon request, and, in turn, LAFD provides fire trucks and personnel to the City of El Segundo if requested in the event of a major incident.<sup>623</sup>

Fire Stations 5, 51 and 95 provide fire protection services in compliance with the LAFC. Fire Station 80 serves as an ARFF and houses all of LAFD's specialized airport fire fighting response equipment.<sup>624</sup> Fire Station 80 only responds to incidents at LAX, and not within the neighboring communities, unless there is an aircraft incident off the airport property. Fire Station 80 is the only on-airport fire station that is mandated to meet three-minute response times to airfield emergencies in accordance with ARFF requirements. Other FAR 139.315-319 requirements include sufficient rescue and fire fighting personnel capable of meeting response times, minimum fire suppressant agent discharge rates, and maintenance of emergency access roads. Fire Station 80 currently meets all ARFF requirements in compliance with FAR 139.315-319. As part of LAWA's Crossfield Taxiway Project (CFTP), in November 2010, Fire Station 80 was relocated and expanded from 14,000 square feet to 27,500 square feet to better accommodate the size, volume, and emergency response equipment associated with future airport operations and newer generation aircraft. The station was relocated to a new site west of the prior station and is now on the airfield adjacent to Taxiway R.

Fire Station 5, which had been located at 6621 W. Manchester Boulevard, was relocated in June 2006 a few blocks south to 8900 Emerson Avenue within the LAX Northside area and the size of the station was increased from 9,640 square feet to 23,750 square feet.<sup>625</sup> Fire Station 5 serves a 4.3 square mile area that includes LAX as well as areas off the airport including portions of Westchester, Loyola Village, Playa Del Rey, and Vista del Mar. Fire Station 5 contains a truck company, an engine company and equipment for a standby USAR, and personnel are trained to respond as a USAR unit.<sup>626</sup> The average response time for Fire Station 5 is less than five minutes.<sup>627</sup>

Located at 10435 Sepulveda Boulevard, Fire Station 51 serves a 4.64 square mile area, including Dockweiler State Beach and a majority of the LAX property. Fire Station 51 provides the primary medical response to the Central Terminal Area (CTA) and gate areas and provides aircraft interior attack support to Fire Station 80 when needed. The average response time for Fire Station 51 to emergencies is less than three minutes.<sup>628</sup>

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<sup>623</sup> Captain Mark Woolf, Battalion Commander, Los Angeles Fire Department, Personal Communication, January 25, 2012.

<sup>624</sup> City of Los Angeles Mayor's Blue Ribbon Panel, Report of the Mayor's Blue Ribbon Panel on Airport Security. A Report to Los Angeles Mayor Antonio R. Villaraigosa Concerning Public Safety at Los Angeles International Airport, June 2011.

<sup>625</sup> Los Angeles Fire Department, Grand Opening of LAFD Station 5 in Westchester, Available: <http://lafd.blogspot.com/2006/06/grand-opening-of-lafd-station-5-in.html>, accessed December 9, 2011.

<sup>626</sup> USAR is considered a multi-hazard discipline as it may be needed for a variety of emergencies or disasters, including earthquakes, hurricanes, typhoons, storms and tornadoes, floods, dam failures, technological accidents, terrorist activities, and hazardous materials releases.

<sup>627</sup> Captain Mark Woolf, Battalion Commander, Los Angeles Fire Department, Personal Communication, January 25, 2012.

<sup>628</sup> Captain Mark Woolf, Battalion Commander, Los Angeles Fire Department, Personal Communication, January 25, 2012.

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Fire Station 95 is located at 10010 International Road and serves a 2.34 square mile area, including the Manchester Square area and the eastern portion of the airport property. Fire Station 95 is a multi-company fire station which also houses equipment for the standby Hazardous Material (HazMat) company and personnel are trained to respond as a HazMat unit.<sup>629</sup> The average response time for Fire Station 95 is less than three minutes.<sup>630</sup>

Based on correspondence with LAFD, response distances from Fire Stations 5, 51, and 95 were calculated from the intersection of World Way and Sepulveda Boulevard.<sup>631</sup>

Throughout LAX and the service areas covered by Fire Stations 5, 51, 95 and 80, LAFD considers fire protection staffing and equipment to be adequate.<sup>632</sup> All four fire stations maintain adequate equipment and personnel to meet the response times required to support LAX air carrier operations under baseline conditions.<sup>633</sup>

In addition to the four fire stations that serve LAX, an Airport Response Coordination Center (ARCC) was recently completed by LAWA in 2010, which increases and streamlines LAX's operational efficiency and crisis management capabilities. The ARCC provides 24-hour centralized coordination support to manage all of the airport's many operations, as well as integrates tenant and governmental agency activities. During a critical incident, the ARCC continues to manage other airport activities that are slightly or unaffected by the incident. During a major incident or airport emergency, the Incident Management Center (IMC) at the ARCC is activated, calling in additional personnel to specifically respond to the event, secure the incident, and provide for the recovery of impacted operations until the airport fully resumes normal operations.<sup>634</sup>

In addition to the services provided to LAX by LAFD, the U.S. Coast Guard has primary notification responsibility in cases of potential or actual over-water emergency. The U.S. Coast Guard's Air Station Los Angeles is responsible for search and rescue operations and protecting the coastal area of Southern California from Dana Point to Morro Bay. Search and rescue equipment at the Air Station Los Angeles includes four MH-65C Dolphin helicopters.<sup>635</sup> Air Station Los Angeles helicopters also provide Homeland Security Patrols for the Ports of Los Angeles and Long Beach, and Port Hueneme in Ventura County.<sup>636</sup>

#### 4.11.1.4 Thresholds of Significance

A significant impact on fire and emergency services would occur if the direct and indirect changes in the environment that may be caused by the particular SPAS alternative would result in one or more of the following future conditions:

- ◆ Restricted emergency access, increased response times, or extended station response distances beyond the standards maintained by the agencies serving LAX and the surrounding communities.
- ◆ The need for a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain adequate service levels.

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<sup>629</sup> HazMat teams respond in the event of a chemical or dangerous toxin or a bomb threat emergency. LAFD will dispatch a HazMat specialized apparatus, with fire fighters who are specially trained for handling these dangerous chemicals.

<sup>630</sup> Captain Mark Woolf, Battalion Commander, Los Angeles Fire Department, [Personal Communication](#), January 25, 2012.

<sup>631</sup> Captain Mark Woolf, Battalion Commander, Los Angeles Fire Department, [Personal Communication](#), January 25, 2012.

<sup>632</sup> Captain Mark Woolf, Battalion Commander, Los Angeles Fire Department, [Personal Communication](#), January 25, 2012.

<sup>633</sup> City of Los Angeles, [Final Environmental Impact Report for Los Angeles International Airport \(LAX\) Proposed Master Plan Improvements](#), April 2004.

<sup>634</sup> City of Los Angeles, Los Angeles World Airports, LAX Airport Response Coordination Center (ARCC) Fact Sheet, Available: [http://www.lawa.org/uploadedFiles/LAXDev/News\\_for\\_LAXDev/Fact%20Sheet%20-%20ARCC.pdf](http://www.lawa.org/uploadedFiles/LAXDev/News_for_LAXDev/Fact%20Sheet%20-%20ARCC.pdf), accessed December 5, 2011.

<sup>635</sup> U.S. Coast Guard, Air Station Los Angeles, Available: <http://www.uscg.mil/d11/airstala/>, accessed December 14, 2011.

<sup>636</sup> U.S. Coast Guard, Air Station Los Angeles, Available: <http://www.uscg.mil/d11/airstala/>, accessed December 14, 2011.

The first threshold was derived from the LAFC (LAMC, Section 57.09.01-11).<sup>637</sup> This threshold also complies with the FAR requirements for ARFF stations. The second threshold is derived from the L.A. CEQA Thresholds Guide.

### 4.11.1.5 Applicable LAX Master Plan Commitments and Mitigation Measures

As part of the LAX Master Plan, LAWA adopted 12 commitments pertaining to fire protection and emergency services in the Alternative D Mitigation Monitoring and Reporting Program (MMRP). The following commitments are applicable to the SPAS alternatives and were considered in the fire protection analysis herein.

#### ◆ **FP-1. LAFD Design Recommendations.**

During the design phase prior to initiating construction of a Master Plan component, LAWA will work with LAFD to prepare plans that contain the appropriate design features applicable to that component, such as those recommended by LAFD, and listed below:

- ◆ **Emergency Access.** During Plot Plan development and the construction phase, LAWA will coordinate with LAFD to ensure that access points for off-airport LAFD personnel and apparatus are maintained and strategically located to support timely access. In addition, at least two different ingress/egress roads for each area, which will accommodate major fire apparatus and will provide for major evacuation during emergency situations, will be provided.
- ◆ **Fire Flow Requirements.** Proposed Master Plan development will include improvements, as needed, to ensure that adequate fire flow is provided to all new facilities. The fire flow requirements for individual Master Plan improvements will be determined in conjunction with LAFD and will meet, or exceed, fire flow requirements in effect at the time.
- ◆ **Fire Hydrants.** Adequate off-site public and on-site private fire hydrants may be required, based on determination by the LAFD upon review of proposed plot plans.
- ◆ **Street Dimensions.** New development will conform to the standard street dimensions shown on the applicable City of Los Angeles Department of Public Works Standard Plan.
- ◆ **Road Turns.** Standard cut-corners will be used on all proposed road turns.
- ◆ **Private Roadway Access.** Private roadways that will be used for general access and fire lanes shall have at least 20 feet of vertical access. Private roadways will be built to City of Los Angeles standards to the satisfaction of the City Engineer and the LAFD.
- ◆ **Dead-End Streets.** Where fire lanes or access roads are provided, dead-end streets will terminate in a cul-de-sac or other approved turning area. No fire lane shall be greater than 700 feet in length unless secondary access is provided.
- ◆ **Fire Lanes.** All new fire lanes will be at least 20 feet wide. Where a fire lane must accommodate a LAFD aerial ladder apparatus or where a fire hydrant is installed, the fire lane will be at least 28 feet wide.
- ◆ **Building Setbacks.** New buildings will be constructed no greater than 150 feet from the edge of the roadways of improved streets, access roads, or designated fire lanes.
- ◆ **Building Heights.** New buildings exceeding 28 feet in height may be required to provide additional LAFD access.

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<sup>637</sup> According to LAFD and LAMC, Section 57.09.1-11, an engine company should be located within 1.0 mile and a truck company should be located within 1.5 miles of an emergency location while meeting fire flow requirements.

## 4.11.1 Fire Protection

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- ◆ Construction/Demolition Access. During demolition and construction activities, emergency access will remain unobstructed.
- ◆ Aircraft Fire Protection Systems. Effective fire protection systems will be provided to protect the areas beneath the wings and fuselage portions of large aircraft. This may be accomplished by incorporating foam-water deluge sprinkler systems with foam-producing and oscillating nozzle (per NFPA 409, aircraft hangars for design criteria).

### ◆ PS-1. Fire and Police Facility Relocation Plan.

Prior to any demolition, construction, or circulation changes that would affect LAFD Fire Stations 51, 80, and 95, or on-airport police facilities, a Relocation Plan will be developed by LAWA through a cooperative process involving LAFD, LAWA Police Division (LAWAPD), the LAPD LAX Detail, and other airport staff. The performance standards for the plan will ensure maintenance of required response times, response distances, fire flows, and a transition to new facilities such that fire and law enforcement services at LAX will not be significantly degraded. The plan will also address future facility needs, including details regarding space requirement, siting, and design.<sup>638</sup>

### ◆ PS-2. Fire and Police Facility Space and Siting Requirements.

During the early design phase for implementation of the Master Plan elements affecting on-airport fire and police facilities, LAWA and/or its contractors will consult with LAFD, LAWAPD, LAPD, and other agencies as appropriate, to evaluate and refine as necessary, program requirements for fire and police facilities. This coordination will ensure that final plans adequately support future facility needs, including space requirements, siting, and design.

### ◆ C-1. Establishment of a Ground Transportation/Construction Coordination Office.

Establish this office for the life of the construction projects to coordinate deliveries, monitor traffic conditions, advise motorists and those making deliveries about detours and congested areas, and monitor and enforce delivery times and routes. LAWA will periodically analyze traffic conditions on designated routes during construction to see whether there is a need to improve conditions through signage and other means.

This office may undertake a variety of duties, including but not limited to:

- ◆ Inform motorists about detours and congestion by use of static signs, changeable message signs, media announcements, airport website, etc.;
- ◆ Work with airport police and the Los Angeles Police Department to enforce delivery times and routes;
- ◆ Establish staging areas;
- ◆ Coordinate with police and fire personnel regarding maintenance of emergency access and response times;
- ◆ Coordinate roadway projects of Caltrans, City of Los Angeles, and other jurisdictions with those of the airport construction projects;
- ◆ Monitor and coordinate deliveries;
- ◆ Establish detour routes;

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<sup>638</sup> Subsequent to approval of the LAX Master Plan, the new, relocated LAFD ARFF Fire Station 80 at LAX was constructed and opened in November 2010.

- ◆ Work with residential and commercial neighbors to address their concerns regarding construction activity; and
- ◆ Analyze traffic conditions to determine the need for additional traffic controls, lane restriping, signal modifications, etc.<sup>639</sup>
- ◆ **ST-9. Construction Deliveries.**

Construction deliveries requiring lane closures shall receive prior approval from the Construction Coordination Office. Notification of deliveries shall be made with sufficient time to allow for any modifications to approved traffic detour plans.
- ◆ **ST-12. Designated Truck Delivery Hours.**

Truck deliveries shall be encouraged to use night-time hours and shall avoid the peak periods of 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:30 p.m.
- ◆ **ST-14. Construction Employee Shift Hours.**

Shift hours that do not coincide with the heaviest commuter traffic periods (7:00 a.m. to 9:00 a.m., 4:30 p.m. to 6:30 p.m.) will be established. Work periods will be extended to include weekends and multiple work shifts, to the extent possible and necessary.
- ◆ **ST-17. Maintenance of Haul Routes.**

Haul routes on off-airport roadways will be maintained periodically and will comply with City of Los Angeles or other appropriate jurisdictional requirements for maintenance. Minor striping, lane configurations, and signal phasing modifications will be provided as needed.
- ◆ **ST-18. Construction Traffic Management Plan.**

A complete construction traffic plan will be developed to designate detour and/or haul routes, variable message, and other sign locations, communication methods with airport passengers, construction deliveries, construction employee shift hours, construction employee parking locations and other relevant factors.
- ◆ **ST-19. Closure Restrictions of Existing Roadways.**

Other than short time periods during nighttime construction, existing roadways will remain open until they are no longer needed for regular traffic or construction traffic, unless a temporary detour route is available to serve the same function. This will recognize that there are three functions taking place concurrently: (1) airport traffic, (2) construction haul routes, and (3) construction of new facilities.
- ◆ **ST-21. Construction Employee Parking Locations.**

During construction of the eastern airport facilities, employee parking locations will be selected that are as close to I-405 and I-105 as possible and can be accessed by employee vehicles with minimal disruption to adjacent streets. Shuttle buses will transport employees to construction sites. In addition, remote parking locations (of not less than 1 mile away from project construction activities) will be established for construction employees with shuttle service to the airport. An emergency return system will be established for employees that must leave unexpectedly.
- ◆ **ST-22. Designated Truck Routes.**

For dirt and aggregate and all other materials and equipment, truck deliveries will be on designated routes only (freeways and non-residential streets). Every effort will be made for routes to avoid residential frontages. The designated routes on City of Los Angeles streets are subject to approval by LADOT's Bureau of Traffic Management and may include, but will not necessarily be limited to:

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<sup>639</sup> Subsequent to approval of the LAX Master Plan, LAWA established a Ground Transportation/Construction Coordination Office in accordance with the provisions of LAX Master Plan Commitment C-1 above.

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Pershing Drive (Westchester Parkway to Imperial Highway); Florence Avenue (Aviation Boulevard to I-405); Manchester Boulevard (Aviation Boulevard to I-405); Aviation Boulevard (Manchester Avenue to Imperial Highway); Westchester Parkway/Arbor Vitae Street (Pershing Drive to I-405); Century Boulevard (Sepulveda Boulevard to I-405); Imperial Highway (Pershing Drive to I-405); La Cienega Boulevard (north of Imperial Highway); Airport Boulevard (Arbor Vitae Street to Century Boulevard); Sepulveda Boulevard (Westchester Parkway to Imperial Highway); I-405; and I-105.

### **4.11.1.6 Impacts Analysis**

#### **4.11.1.6.1 Alternative 1**

Alternative 1 includes various features that are particularly relevant to the analysis of impacts to fire protection services. These features include airfield facility and terminal improvements, ground access improvements and parking, and the reconfiguration or relocation of the on-airfield fuel truck filling station.

#### **Airfield Improvements**

Airfield improvements under Alternative 1 would include the movement of Runway 6L/24R 260 feet north, the addition of a centerfield taxiway, extension of Runway 6R/24L, improvements to Taxiway D and Taxiway E, and relocation of the service road. These improvements would provide a greater amount of runway and taxiway facilities that meet FAA Airport Design Standards for Aircraft Design Group (ADG) V and VI aircraft under certain operating conditions, particularly as related to separation requirements, thereby reducing the need for special operations restrictions, modifications of standards, and waivers from FAA. Additionally, Alternative 1 includes the addition of a center parallel taxiway, which would provide safety benefits related to arriving and departing aircraft on the adjacent runways. As described in Section 4.7.2, *Safety*, these improvements to the north airfield under Alternative 1 would enhance the safety and efficiency of the airfield, thereby decreasing the potential need for emergency fire response associated with airfield accidents. Furthermore, Fire Station 80 was recently relocated and expanded to better accommodate the size, volume, and emergency response equipment associated with future operations and newer generation aircraft. The relocated ARFF Fire Station 80 is currently better situated relative to the midpoints of the outermost runways (Runway 6L/24R on the north airfield and Runway 7R/25L on the south airfield), and this more centralized location enables personnel to better respond to emergencies on the airfield. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access in association with airfield improvements. Therefore, impacts to fire protection services related to airfield improvements under Alternative 1 would be less than significant.

#### **Terminal Modifications**

Under Alternative 1, terminal improvements include the addition of Terminal 0, modifications to concourse area and/or gates at Terminals 1 and 2, replacement of the Terminal 3 concourse, and the northern extension of concourse areas and gates at Tom Bradley International Terminal (TBIT) and the future Midfield Satellite Concourse (MSC).

Development of new terminal areas could increase demand for fire protection and emergency services and the need for new, expanded, consolidated, or relocated fire protection facilities compared to baseline conditions due to expanded terminal areas and increases in passenger activity over time. However, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, facilities, and emergency access. Potential impacts associated with staffing, equipment, and facilities would also be continually evaluated and addressed pursuant to standard LAFD procedures and fire code requirements. Furthermore, as previously indicated, Fire Station 80 located at LAX was recently expanded substantially in size to better serve future airport operations, and Fire Station 5 was substantially increased in size when it was relocated in 2006. These

upgraded facilities and the recently completed ARCC are expected to enhance fire protection and support demand for fire services at LAX into the foreseeable future. Therefore, impacts to fire protection services associated with terminal improvements would be less than significant.

### **Ground Access Improvements and Parking**

Under Alternative 1, a new Intermodal Transportation Facility (ITF) would be constructed that would include public parking, bus/shuttle areas, and remote passenger pick up/drop off. Additional public parking would be located in Manchester Square. A dedicated busway would be constructed linking the Manchester Square parking to the CTA, with stops at the future Metro LAX/Crenshaw Light Rail Station and the new ITF.

Construction of the ITF, dedicated busway, and other ground access improvements would reduce traffic congestion and curb-front demands, which would reduce the potential for automobile collisions, automobile/pedestrian conflicts, and automobile-related emergency response incidents at the airport compared to baseline conditions. Improved traffic flow associated with the new ground access facilities is also expected to improve response times for fire protection services. Nonetheless, development of these new ground access facilities may increase the need for fire protection services in order to respond to calls and provide service to these areas.

Relative to the need for new, expanded, consolidated, or relocated fire protection facilities, recent expansion and upgrades to Fire Station 80 and Fire Station 5 have substantially upgraded fire protection services at LAX and, as a result, any need for new or expanded fire protection facilities is expected to be limited. Furthermore, potential impacts to fire protection and emergency services would be reduced by LAX Master Plan Commitments FP-1 and PS-2. LAX Master Plan Commitment FP-1, LAFD Design Recommendations, addresses coordination with LAFD regarding emergency access and other design needs to ensure that fire protection service levels are maintained. LAX Master Plan Commitment PS-2, Fire and Police Facility Space and Siting Requirements, would require ongoing consultation with LAFD to evaluate and refine, as necessary, program requirements for fire facilities. This coordination would ensure that final plans for ground access-related improvements under Alternative 1 adequately support future facility needs, including space requirements, siting, and design. Potential impacts associated with staffing and equipment would also be continually evaluated and addressed pursuant to standard LAFD procedures and fire code requirements. Furthermore, fire facilities serving LAX have been recently expanded to improve service at LAX. Therefore, impacts to fire protection services associated with ground access improvements would be less than significant.

### **Removal/Reconfiguration of Existing Facilities**

Under Alternative 1, the on-airfield fuel truck filling station located at the north end of the LAXFUEL Fuel Farm would be reconfigured or relocated within the Airfield Operations Area (AOA). If relocation of the on-airfield fuel truck filling station is necessary, existing fire protection and safety features associated with the station would be maintained at the relocated site. In addition, LAFD personnel are trained in techniques for fighting hydrocarbon fires. For these reasons, impacts to fire protection services associated with the potential relocation of the on-airfield fuel truck filling station would be less than significant. Additional discussion of emergency response is provided in Section 4.7.3, *Hazardous Materials*.

### **Construction**

Under Alternative 1, traffic congestion associated with construction of the proposed improvements would have the potential to hamper or delay emergency response. However, temporary roadway delays would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which is now in place, would ensure, among other things, proper coordination and planning with fire protection agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic congestion during construction. In the event

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construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of the proposed improvements would be less than significant.

### **4.11.1.6.2 Alternative 2**

Alternative 2 contains project features that are similar to Alternative 1, such as the extension of Runway 6R/24L, some taxiway and taxilane improvements, relocation of the service road, and terminal and ground access components. Primary differences are related to improvements within the north airfield, which would not include a northerly movement of Runway 6L/24R, the addition of a centerfield taxiway, or the realignment of Lincoln Boulevard under this alternative.

#### **Airfield Improvements**

Under Alternative 2, improvements to Runway 6R/24L would be the same as Alternative 1; however, Runway 6L/24R would not be relocated or extended. In addition, no centerfield taxiway would be constructed. The restrictions and operating procedures in place for the north airfield under current conditions would remain. Nevertheless, as described in Section 4.7.2, *Safety*, improvements to the north airfield, primarily in the form of relocating and reconfiguring certain runway exit taxiways and runway crossings, would enhance the overall safety and efficiency of the airfield compared to baseline conditions, decreasing the potential demand for fire protection and emergency services and personnel associated with airfield accidents.

As mentioned previously, the recent relocation and expansion of Fire Station 80 provides for better emergency response to airfield-related incidents. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Thus, impacts to fire protection services associated with airfield improvements under Alternative 2 would be less than significant.

#### **Terminal Modifications**

Under Alternative 2, terminal improvements would be the same as Alternative 1. Development of new terminal areas could increase demand for fire protection and emergency services and the need for new, expanded, consolidated, or relocated fire protection facilities compared to baseline conditions due to expanded terminal areas and increases in passenger activity over time. However, in addition to recent fire facility upgrades, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, facilities, and emergency access. Therefore, impacts to fire protection services would be the same as described above for Alternative 1, and would be less than significant.

#### **Ground Access Improvements and Parking**

Under Alternative 2, ground access improvements would be similar to Alternative 1, with the exception of Lincoln Boulevard, which would not be relocated. As discussed under Alternative 1, construction of ground access improvements, such as the ITF and dedicated busway, would reduce traffic congestion and curb-front demands, which would reduce the potential for automobile collisions, automobile/pedestrian conflicts, and automobile-related emergency response incidents at the airport compared to baseline conditions. In addition to recent fire facility upgrades, potential impacts would also be reduced through LAX Master Plan commitments and recent fire facility upgrades. Therefore, impacts to fire protection services would be similar to Alternative 1, and would be less than significant.



### **Removal/Reconfiguration of Existing Facilities**

As with Alternative 1, under Alternative 2, the on-airfield fuel truck filling station located at the north end of the LAXFUEL Fuel Farm would be reconfigured or relocated within the AOA. If relocation of the on-airfield fuel truck filling station is necessary, existing fire protection and safety features associated with the station would be maintained at the relocated site. In addition, LAFD personnel are trained in techniques for fighting hydrocarbon fires. For these reasons, impacts to fire protection services associated with the potential relocation of the on-airfield fuel truck filling station would be less than significant. Additional discussion of emergency response is provided in Section 4.7.3, *Hazardous Materials*.

### **Construction**

Construction associated with proposed improvements under Alternative 2 would be similar to Alternative 1 and would have the potential to hamper or delay emergency response.

However, as discussed under Alternative 1, temporary roadway delays would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. In addition, LAX Master Plan Commitments, ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of the proposed improvements would be less than significant.

#### **4.11.1.6.3 Alternative 3**

Alternative 3 reflects the improvements of the approved LAX Master Plan and consists of implementation of all components of the LAX Master Plan, including the "Yellow Light Projects" and associated improvements.

### **Airfield Improvements**

Under Alternative 3, Runway 6R/24L would be moved 340 feet south, along with the addition of a new centerfield taxiway, extension of Runway 6L/24R, and relocation and improvements to Taxiway E, Taxiway D, and service roads. Airfield improvements under Alternative 3, would provide runway and taxiway facilities that would meet FAA Airport Design Standards for ADG V and VI aircraft under certain conditions thereby reducing the need for special operations restrictions, modifications of standards, and waivers from FAA. Additionally, Alternative 3 includes the addition of a center parallel taxiway, which would provide safety benefits related to arriving and departing aircraft on the adjacent runways. Therefore, as described in Section 4.7.2, *Safety*, improvements to the north airfield would enhance the overall safety and efficiency of the airfield compared to baseline conditions, decreasing the potential demand for fire protection and emergency services and personnel associated with airfield accidents.

As discussed previously, subsequent to approval of the LAX Master Plan, Fire Station 80 was relocated to a new site east of the prior facility and was expanded. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Thus, impacts to fire protection services related to airfield improvements under Alternative 3 would be less than significant.

### **Terminal Modifications**

Terminal improvements under Alternative 3 would include demolition of the concourses/gates at Terminals 1, 2, and 3 and replacement with a new linear concourse, elimination of the northernmost gates at TBIT, and replacement of the existing CTA parking structures with new passenger processing terminals.

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Development of new terminal areas could increase demand for fire protection and emergency services and the need for new, expanded, consolidated, or relocated fire protection facilities compared to baseline conditions. However, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Thus, impacts to fire protection services associated with terminal improvements would be less than significant.

#### **Ground Access Improvements and Parking**

Key ground access improvements under Alternative 3 include development of a Ground Transportation Center (GTC) at Manchester Square, an Intermodal Transportation Center (ITC) at Continental City with a pedestrian bridge to the existing Metro Green Line Station, and a Consolidated Rental Car Facility (CONRAC) at Lot C; development of two Automated People Mover systems to link the ITC, CONRAC, and CTA and link the GTC and CTA; construction of new on-airport roads east of and parallel to Aviation Boulevard; and construction of a West Employee Parking facility. Alternative 3 would not include modifications to Lincoln Boulevard.

Construction of the ground access improvements under Alternative 3 would reduce traffic congestion and curb-front demands, which would reduce the potential for automobile collisions, automobile/pedestrian conflicts, and emergency response incidents at the airport compared to baseline conditions. Improved traffic flow associated with new ground access facilities is also expected to improve response times for fire protection services. In addition to recent fire facility upgrades, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Thus, impacts to fire protection services associated with ground access improvements would be less than significant.

#### **Removal/Reconfiguration of Existing Facilities**

Under Alternative 3, the existing LAXFUEL Fuel Farm would remain in its current location on the west side of the airport, but the overall footprint of the facility would be reduced. Some existing tanks on the site would require relocation. In addition, the on-airfield fuel truck filling station would be relocated within the AOA. Due to the safety features currently in place at the LAXFUEL Fuel Farm and the filling station, the risk of fire or other hazardous incident at the sites is low. Safety features would be incorporated into the new/reconfigured facilities to provide a comparable level of safety. Furthermore, both facilities would be located within proximity to Fire Station 80 and LAFD personnel are trained in techniques for fighting hydrocarbon fires. For these reasons, impacts to fire protection services associated with the removal and reconfiguration with existing facilities would be less than significant. Additional discussion of emergency response is provided in Section 4.7.3, *Hazardous Materials*.

#### **Construction**

Traffic congestion associated with construction of major projects associated with Alternative 3 would have the potential to hamper or delay emergency response. However, these impacts would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which is now in place, would ensure, among other things, proper coordination and planning with fire protection agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of the proposed improvements would be less than significant.

#### **4.11.1.6.4 Alternative 4**

Under this alternative, none of the Yellow Light Projects or alternatives thereto would be constructed. Only ongoing or reasonably-foreseeable non-Yellow Light Projects would be developed, such as the Bradley West Project, an extension to Runway 6R/24L for Runway Safety Area (RSA) improvements, the MSC and related new passenger processor within the CTA, and various terminal improvements. Also under Alternative 4, the CONRAC at Lot C would be constructed and a new parking structure would be developed in Continental City to accommodate the public parking displaced by the CONRAC.

##### **Airfield Improvements**

Under Alternative 4, airfield facilities would be similar to baseline conditions, with the exception of an easterly extension of Runway 6R/24L for RSA improvements and an associated extension of Taxiway E. With these improvements, Runway 6R/24L would comply with federal RSA requirements. No centerfield or connecting taxiway improvements are included with this alternative.

As described in Section 4.7.2, *Safety*, the proposed airfield improvements under Alternative 4 would only meet the existing federal mandate related to RSA requirements, and would not materially change the safety and efficiency of the north airfield compared to baseline conditions. As such, there would effectively be no change in existing demand for fire protection and emergency services and personnel associated with airfield accidents. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Therefore, impacts to fire protection services related to airfield improvements would be less than significant.

##### **Terminal Modifications**

No changes to terminal facilities would occur under Alternative 4; however, the terminals would handle increases in passenger activity over time. These increases are not expected to result in notably greater demand for fire protection services. Therefore, impacts to fire protection services associated with terminal improvements under Alternative 4 would be less than significant.

##### **Ground Access Improvements and Parking**

Under Alternative 4, the CONRAC at Lot C would be constructed and a new parking structure would be developed in Continental City. As the Continental City site is currently unoccupied, construction of the new public parking structure would introduce a concentration of individuals that would incrementally increase demand for fire protection and emergency services. However, Fire Station 95 is located less than one mile from the proposed parking structure at Continental City, within the maximum response distances per the LAFC, and would be supported by nearby LAFD Fire Stations 95 and 51. Furthermore, proposed ground access improvements would reduce traffic congestion and reduce the potential for emergency events at the airport compared to baseline conditions. Improved traffic flow associated with ground access improvements is also expected to improve response times for fire protection services.

In addition to recent fire facility upgrades, potential impacts to fire protection and emergency services would be reduced by LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, which would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Thus, impacts to fire protection services associated with ground access improvements would be less than significant.

##### **Removal/Reconfiguration of Existing Facilities**

Under Alternative 4, the LAXFUEL Fuel Farm and on-airfield fuel truck filling station would not be modified or removed. The only facilities that would be removed are commercial uses and parking lots. These changes would not affect fire protection services; therefore, no impacts would occur under this alternative.

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### **Construction**

Under Alternative 4, traffic congestion associated with construction of proposed improvements would have the potential to hamper or delay emergency response. Construction-related traffic congestion would be less than the other alternatives due to the lesser amount of construction under this alternative. As with the other alternatives, these impacts would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which is now in place, would ensure, among other things, proper coordination and planning with fire protection agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of the proposed improvements would be less than significant.

### **4.11.1.6.5 Alternative 5**

#### **Airfield Improvements**

Airfield improvements associated with Alternative 5 would be similar to Alternative 1, except that Runway 6L/24R would be relocated 350 feet north. Airfield improvements under Alternative 5 would provide a runway and taxiway facilities that would meet FAA Airport Design Standards for ADG V and VI aircraft, particularly as related to separation requirements, thereby reducing the need for special operations restrictions, modifications of standards, and waivers from FAA. Additionally, Alternative 5 includes the addition of a center parallel taxiway, which would provide safety benefits related to arriving and departing aircraft on the adjacent runways. As described in Section 4.7.2, *Safety*, these improvements to the design of the north airfield would enhance safety and efficiency compared to baseline conditions, thereby decreasing demand on fire protection services and personnel associated with airfield accidents. As mentioned above, the recent relocation and expansion of Fire Station 80 provides for better emergency response to airfield-related incidents. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access in association with airfield improvements. Therefore, impacts to fire protection services related to airfield improvements under Alternative 5 would be less than significant.

#### **Terminal Modifications**

Under Alternative 5, the northerly building limits and/or gating area associated with Terminal 3, TBIT concourse extension, and MSC extension would be more southerly than under Alternative 1. However, the basic features associated with the terminal components of this alternative would be the same as Alternative 1. Therefore, impacts to fire protection services would be the same as described above for Alternative 1. As with Alternative 1, with LAX Master Plan commitments, regulatory requirements, and LAFD procedures, these impacts would be less than significant.

#### **Ground Access Improvements and Parking**

No ground access or parking improvements are associated with Alternative 5.

#### **Removal/Reconfiguration of Existing Facilities**

Modifications to existing facilities within the AOA would be generally similar to those described above for Alternative 3, with the exception of modifications to terminals/concourses. Under Alternative 5, the overall footprint of the LAXFUEL Fuel Farm would be reduced to accommodate north airfield modifications and the on-airfield fuel truck filling station would be relocated within the AOA. Impacts to fire protection

services associated with these modifications would be the same as described above for Alternative 3. These impacts would be less than significant.

### **Construction**

Under Alternative 5, impacts associated with construction of airfield and terminal improvements would be similar to Alternative 1. As with Alternative 1, construction would have the potential to hamper or delay emergency response. However, construction-related roadway delays would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which was established subsequent to approval of the LAX Master Plan, would ensure, among other things, proper coordination and planning with the LAFD and other fire and emergency response agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of improvements under Alternative 5 would be less than significant.

### **4.11.1.6.6 Alternative 6**

#### **Airfield Improvements**

Airfield improvements associated with Alternative 6 would be similar to Alternative 1, except that Runway 6L/24R would be relocated 100 feet north. Airfield improvements under Alternative 6 would provide runway and taxiway facilities that would meet FAA Airport Design Standards for ADG IV and V aircraft under certain conditions, particularly as related to separation requirements, thereby reducing the need for special operations restrictions, modifications of standards, and waivers from FAA. Additionally, Alternative 6 includes the addition of a center parallel taxiway, which would provide safety benefits related to arriving and departing aircraft on the adjacent runways. As described in Section 4.7.2, *Safety*, these improvements to the design of the north airfield would enhance safety and efficiency compared to baseline conditions, thereby decreasing demand on fire protection services and personnel associated with airfield accidents. As mentioned above, the recent relocation and expansion of Fire Station 80 provides for better emergency response to airfield-related incidents. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access in association with airfield improvements. Therefore, impacts to fire protection services related to airfield improvements under Alternative 6 would be less than significant.

#### **Terminal Modifications**

Under Alternative 6, terminal modifications would be the same as Alternative 1. Therefore, impacts to fire protection services would be the same as described above for Alternative 1. As with Alternative 1, with LAX Master Plan commitments, regulatory requirements, and LAFD procedures, these impacts would be less than significant.

#### **Ground Access Improvements and Parking**

No ground access or parking improvements are associated with Alternative 6.

#### **Removal/Reconfiguration of Existing Facilities**

As with Alternative 1, under Alternative 6, the on-airfield fuel truck filling station located at the north end of the LAXFUEL Fuel Farm would be reconfigured or relocated within the AOA. Impacts to fire protection

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services would be the same as described above for Alternative 1. These impacts would be less than significant.

#### **Construction**

Impacts to emergency response times related to construction of airfield and terminal improvements would be the same as described above for Alternative 5. As with Alternative 5, construction impacts under Alternative 6 would have the potential to hamper or delay emergency response. However, construction-related roadway delays would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which was established subsequent to approval of the LAX Master Plan, would ensure, among other things, proper coordination and planning with the LAFD and other fire and emergency response agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of improvements under Alternative 6 would be less than significant.

#### **4.11.1.6.7 Alternative 7**

##### **Airfield Improvements**

The distinguishing feature of this alternative is the movement of Runway 6R/24L 100 feet south. Similar to Alternative 1, a new centerfield taxiway would be constructed, Runway 6R/24L would be extended, Taxiway E and Taxiway D would be modified/improved, and the service road would be relocated. Airfield improvements would provide runway and taxiway facilities that would meet FAA Airport Design Standards for ADG IV and V aircraft under certain conditions, particularly as related to separation requirements, thereby reducing the need for special operations restrictions, modifications of standards, and waivers from FAA. Additionally, Alternative 7 includes the addition of a center parallel taxiway, which would provide safety benefits related to arriving and departing aircraft on the adjacent runways. As described in Section 4.7.2, *Safety*, these improvements to the design of the north airfield would enhance safety and efficiency compared to baseline conditions, thereby decreasing demand on fire protection services and personnel associated with airfield accidents. As mentioned above, the recent relocation and expansion of Fire Station 80 provides for better emergency response to airfield-related incidents. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access in association with airfield improvements. Therefore, impacts to fire protection services related to airfield improvements under Alternative 7 would be less than significant.

##### **Terminal Modifications**

As with Alternative 5, under Alternative 7, the northerly building limits and/or gating area associated with Terminal 3, TBIT concourse extension, and MSC extension would be more southerly than under Alternative 1. However, the basic features associated with the terminal components of this alternative would be the same as Alternative 1. Therefore, impacts to fire protection services associated with terminal modifications would be the same as described for Alternative 1. These impacts would be less than significant.

##### **Ground Access Improvements and Parking**

No ground access or parking improvements are associated with this alternative.

### **Removal/Reconfiguration of Existing Facilities**

Modifications to existing facilities within the AOA would be generally similar to those described above for Alternative 3, with the exception of modifications to terminals/concourses. Under Alternative 7, the overall footprint of the LAXFUEL Fuel Farm would be reduced and the on-airfield fuel truck filling station would be relocated. Impacts to fire protection services associated with these modifications would be the same as described above for Alternative 3 and would be less than significant.

### **Construction**

Traffic congestion associated with construction of major projects associated with Alternative 7 would have the potential to hamper or delay emergency response. However, these impacts would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which was established subsequent to approval of the LAX Master Plan, would ensure, among other things, proper coordination and planning with the LAFD and other fire and emergency response agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of improvements under Alternative 7 would be less than significant.

## **4.11.1.6.8 Alternative 8**

### **Airfield Improvements**

No airfield improvements are associated with Alternative 8.

### **Terminal Modifications**

No changes to terminal facilities would occur under Alternative 8; however, the terminals would handle increases in passenger activity over time. These increases are not expected to result in notably greater demand for fire protection services. Therefore, impacts to fire protection services associated with terminal improvements under Alternative 8 would be less than significant.

### **Ground Access Improvements and Parking**

Under Alternative 8, a CONRAC and related customer service area and parking would be constructed in a portion of the Manchester Square area. Other ground access and parking improvements would be similar to Alternative 1, including the creation of a dedicated busway, development of the ITF, new parking, and various circulation improvements.

As with Alternative 1, ground access improvements under Alternative 8 would reduce traffic congestion and curb-front demands, which would reduce the potential for automobile collisions, automobile/pedestrian conflicts, and other automobile-related emergency response incidents at the airport. Improved traffic flow associated with the new ground access facilities is also expected to improve response times for fire protection services. Although development of the ground access facilities may result in additional need for fire protection services, recent fire facility upgrades, LAX Master Plan Commitment FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of fire code requirements, would ensure maintenance of adequate response times, fire flows, staffing, equipment, facilities, and emergency access. Thus, impacts to fire protection services associated with ground access improvements would be less than significant.

### **4.11.1 Fire Protection**

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#### **Removal/Reconfiguration of Existing Facilities**

Under Alternative 8, facilities that would be removed include commercial uses and parking lots. These changes would not affect fire protection services; therefore, no impacts would occur under this alternative.

#### **Construction**

Construction activities related to Alternative 8 and associated traffic congestion would have the potential to hamper or delay emergency response. However, these impacts would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which was established subsequent to approval of the LAX Master Plan, would ensure, among other things, proper coordination and planning with the LAFD and other fire and emergency response agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of Alternative 8 improvements would be less than significant.

### **4.11.1.6.9 Alternative 9**

#### **Airfield Improvements**

As with Alternative 8, no airfield improvements are associated with Alternative 9.

#### **Terminal Modifications**

No changes to terminal facilities would occur under Alternative 9; however, the terminals would handle increases in passenger activity over time. These increases are not expected to result in notably greater demand for fire protection services. Therefore, impacts to fire protection services associated with terminal improvements under Alternative 9 would be less than significant.

#### **Ground Access Improvements and Parking**

Ground access improvements associated with Alternative 9 would be similar to Alternative 8, except that an Automated People Mover (APM) system would be developed instead of a busway. Impacts to fire protection services associated with these improvements would be the same as described above for Alternative 8 and would be less than significant.

#### **Removal of Existing Facilities**

As with Alternative 8, under Alternative 9, facilities that would be removed include commercial uses and parking lots. These changes would not affect fire protection services; therefore, no impacts would occur under this alternative.

#### **Construction**

Construction activities related to Alternative 9 and associated traffic congestion would have the potential to hamper or delay emergency response. However, these impacts would be reduced or avoided through implementation of LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which was established subsequent to approval of the LAX Master Plan, would ensure, among other things, proper coordination and planning with the LAFD and other fire and emergency response agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction



activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. Therefore, impacts to emergency response times related to construction of Alternative 9 improvements would be less than significant.

### 4.11.1.6.10 Summary of Impacts

Airfield improvements under Alternatives 1, 2, 3, 4, 5, 6, and 7 would enhance the safety and efficiency of the airfield compared to baseline conditions, thereby decreasing the potential need for emergency fire response associated with airfield accidents. Improvements to fire stations serving LAX, along with LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, and enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access in association with airfield improvements. Therefore, impacts to fire protection services related to airfield improvements under Alternatives 1, 2, 3, 4, 5, 6, and 7 would be less than significant. No airfield improvements are associated with Alternatives 8 and 9.

LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, facilities, and emergency access associated with development of new terminal areas under Alternatives 1, 2, 3, 5, 6, and 7. Potential impacts associated with staffing, equipment, and facilities would also be continually evaluated and addressed pursuant to standard LAFD procedures and fire code requirements. Moreover, upgraded fire protection facilities and the recently completed ARCC are expected to enhance fire protection and support demand for fire services at LAX into the foreseeable future. Therefore, impacts to fire protection services associated with terminal improvements under Alternatives 1, 2, 3, 5, 6, and 7 would be less than significant. No terminal improvements are associated with Alternatives 4, 8, and 9.

Construction of ground access improvements under Alternatives 1, 2, 3, 4, 8, and 9 would reduce traffic congestion and curb-front demands, which would reduce the potential for automobile collisions, automobile/pedestrian conflicts, and automobile-related emergency response incidents at the airport compared to baseline conditions. Improved traffic flow associated with the new ground access facilities is also expected to improve response times for fire protection services. Potential impacts to fire protection and emergency services would be further reduced by LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements. Furthermore, fire facilities serving LAX have been recently expanded to improve service at LAX. Therefore, impacts to fire protection services associated with ground access improvements under Alternatives 1, 2, 3, 4, 8, and 9 would be less than significant. No ground access or parking improvements are associated with Alternatives 5, 6, and 7.

Under all alternatives, traffic congestion associated with construction of the proposed improvements would have the potential to hamper or delay emergency response. However, temporary roadway delays would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. In addition, LAX Master Plan Commitments ST-9, Construction Deliveries, ST-12, Designated Truck Delivery Hours, ST-14, Construction Employee Shift Hours, ST-17, Maintenance of Haul Routes, ST-18, Construction Traffic Management Plan, ST-19, Closure Restrictions of Existing Roadways, ST-21, Construction Employee Parking Locations, and ST-22, Designated Truck Routes, would serve to further reduce potential traffic congestion during construction. Therefore, impacts to emergency response times related to construction of the proposed improvements under all of the alternatives would be less than significant.

### 4.11.1.7 Mitigation Measures

Implementation of LAX Master Plan Commitments FP-1, PS-1, PS-2, C-1, ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would ensure that impacts relative to fire and emergency services

#### **4.11.1 Fire Protection**

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associated with Alternatives 1 through 9 would be less than significant. Therefore, no mitigation measures specific to SPAS are required.